Data Sheet
FUJITSU Server PRIMERGY TX2540 M1 Dual socket Intel® Xeon® processor tower server

Well-balanced price- performance

FUJITSU Server PRIMERGY systems provide the most powerful and flexible data center solutions for companies of all sizes, across all industries and for any type of workload. This includes expandable PRIMERGY tower servers for remote and branch offices, versatile rack-mount servers, compact and scalable blade systems, as well as density-optimized scale-out servers. They convince by business proven quality with a wide range of innovations, highest efficiency cutting operational cost and complexity, and provide more agility in daily operations in order to turn IT faster into a business advantage.

Perfect for small and medium businesses as well as branch offices, FUJITSU Server PRIMERGY TX tower systems are robust and cost-efficient servers by providing rock solid reliability. Additionally they are characterized by simple IT operations, low power consumption and quiet operation so that they can be handled by non-technically trained staff and can be used in standard office environments. By the way: Almost all PRIMERGY TX servers can be rack-mounted to offer best flexibility.

PRIMERGY TX2540 M1

The FUJITSU PRIMERGY TX2540 M1 is the perfect Tower Server for small and medium-sized companies (SMB) as well as branches. It supports up to two processors of the Intel Xeon E5-2400 v2 family, thus combining affordable performance with balanced expandability. Its maximum 24 hard disks and 192 GB of RAM is ideal as a starting-point for server virtualization or as a database and communication server. Furthermore, optional redundancy secures stable and reliable operation. Thanks to its minimum operational noise, the server is ideal for offices, for example under the desk. Furthermore, the comprehensive Fujitsu ServerView® Suite provides support for administrators during server installation, deployment and administration.

Features & Benefits

Main Features	Benefits
Cost effective performance	
■ Intel® Xeon® E5-2400 v2 product family with up to 10 cores ■ Up to 192 GB memory (12 DIMM slots) and up to 6 PCIe slots	■ Provides a well-balanced price / performance ratio for SMBs and branch offices ■ Optimized for server-based computing, virtualization, databases and ERP & CRM software, collaboration & messaging solutions
Solid expandability and redundancy	
■ Expanded scalability of up to 24 2.5-inch or 8 3.5-inch storage drives, 5 PCIe Gen2/3 and 1 PCI slot ■ Optional redundant power supply units and fans ■ Optional rack mount kit	■ High levels of expandability and the performance of two processors – perfect for virtualization ■ Tailor the level of redundancy to your needs and your budget ■ When the company grows your PRIMERGY TX2540 M1 can easily be converted into a rack server
Silent, compact, and easy to deploy	
■ Low noise emissions through optimized air flow and Fujitsu's Cool-Safe™ technology ■ Compact 4U chassis ■ Fujitsu ServerView Suite including tools for installation and deployment, permanent status monitoring and control	■ Silent operation for use in offices or showrooms ■ So small and silent that it might even be placed under desks ■ The comprehensive tools of the Fujitsu ServerView Suite eases the administrators life

Technical details

PRIMERGY TX2540 M1					
Base unit	PRIMERGY TX2540 M1 LFF	PRIMERGY TX2540 M1 LFF	PRIMERGY TX2540 M1 SFF	PRIMERGY TX2540 M1 LFF	PRIMERGY TX2540 M1 SFF
Housing types	Tower	Tower	Tower	Rack	Rack
Storage drive architecture	3.5-inch	3.5-inch	2.5-inch	3.5-inch	2.5-inch
Power supply	Standard	Hot-plug	Hot-plug	Hot-plug	Hot-plug

Mainboard	
Mainboard type	D3099-B
Chipset	Intel® C602
Processor quantity and type	1 - 2 x Intel® Xeon® processor E5-2400 v2 product family
Processor	Intel® Xeon® processor E5-2403v2 (4C/4T, 1.80 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,333 MHz, 80 W)
	Intel® Xeon® processor E5-2407v2 (4C/4T, 2.40 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1,333 MHz, 80 W)
	Intel® Xeon® processor E5-2420v2 (6C/12T, 2.20 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,600 MHz, 80 W)
	Intel® Xeon® processor E5-2430Lv2 (6C/12T, 2.40 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,600 MHz, 60 W)
	Intel® Xeon® processor E5-2430v2 (6C/12T, 2.50 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,600 MHz, 80 W)
	Intel® Xeon® processor E5-2440v2 (8 Cores / 16 Threads, 1.90 GHz, TLC: 20 MB, Turbo: Yes, 7.2 GT/s, Mem bus: 1,600 MHz, 95 W)
	Intel® Xeon® processor E5-2450v2 (8C/16T, 2.50 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 95 W)
	Intel® Xeon® processor E5-2470v2 (10C/20T, 2.40 GHz, TLC: 25 MB, Turbo: Yes, 8.0 GT/s, Mem bus: 1,600 MHz, 95 W)
Memory slots	12 (6 DIMMs per CPU, 3 channels with 2 slots per channel)
Memory slot type	DIMM (DDR3)
Memory capacity (min. - max.)	4 GB - 192 GB
Memory protection	Advanced ECC SDDC (Chipkill™)
Memory notes	On project release max 768 GB possible Performance Mode requires identical modules in all channels of each bank per CPU.
Memory options	4 GB (1 module(s) 4 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, single rank
	8 GB (1 module(s) 8 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, single rank
	16 GB (1 module(s) 16 GB) DDR3 LV, registered, ECC, 1,600 MHz, PC3-12800, DIMM, dual rank

Interfaces	
USB 2.0 ports	9 x USB 2.0 (2 x front UHCI USB, 4 x rear UHCI USB 2 x internal for backup, 1x UFM and internal USB)
Graphics (15-pin)	1 x VGA
Serial 1 (9-pin)	1 x serial RS-232-C (9 pin), usable for iRMC S4 or system or common use
LAN / Ethernet (RJ-45)	2 x Gbit/s Ethernet (Intel i210)
Management LAN (RJ45)	Management LAN traffic can be switched to shared onboard Gbit LAN port 1 x dedicated management LAN port for iRMC S4 (10/100/1000 Mbit/s)

Onboard or integrated Controller	
RAID controller	additional RAID controller options are described under Components RAID controller
SATA Controller	Intel® C602, 6-port SATA (4x for internal hard disks, 2x for accessible drives)
SATA controller type notes	On board SATA controller supports RAID levels 0, 1, 10
Remote Management Controller	IPMI 2.0 compatible Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller)

Onboard or integrated Controller		
Trusted Platform Module (TPM)	Infineon / separate module; TCG V1.2 compliant (option)	
Slots		
PCI-Express 3.0 x4 (mech. x8)	2 x Full height 280 mm length	
PCI-Express 3.0 x16	2 x Full height first slot: 280 mm length, second slot: 170 mm length (only available with second CPU)	
PCI-Express 2.0 x4 (mech. x8)	1 x Full height 230 mm length; preferred RAID slot	
PCI-slots	1 x PCI 32Bit/33 MHz (support for 3.3V and 3.3V/5V cards; no support of 5V only cards)	
Slot Notes	in SAS configuration 1x PCI-Express occupied by modular RAID controller	
Drive bays		
Storage drive bays	3.5-inch or 2.5-inch hot-plug SAS/SATA	
Accessible drive bays	3 x 5.25/1.6-inch	
Notes accessible drives	All possible options described in relevant system configurator.	
Storage drive bays	Max. 8 x 3.5-inch	Max. 24 x 2.5-inch
Accessible drive bays	3 x 5.25/1.6-inch for 1 x backup drive + 1 x ODD	3 x 5.25/1.6-inch for 1 x backup drive + 1 x ODD
Fan Configuration		
Number of fans	4	
Fan configuration	3 fans as standard plus 1 additional fan for redundancy operation possible (option)	
Fan notes	redundant fan configuration depends on base unit and is only available in combination with redundant PSU	
Operating panel		
Operating buttons	On/off switch NMI button Reset button	
Status LEDs	System status (orange / yellow) Identification (blue) Hard disks access (green) Power (amber / green) CPU status Fan status Hard disk error Temperature CSS (yellow) Memory status PSU status (green/ amber) At system rear side: System status (orange / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)	
Service display	Optional: ServerView Local Service Display (LSD)	
BIOS		
BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support	

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server R2 2012
	Microsoft® Windows Server® 2012 R2 Datacenter
	Microsoft® Windows Server® 2012 R2 Standard
	Microsoft® Windows Server® 2012 R2 Essentials
	Microsoft® Windows Storage Server 2012 R2 Standard
	Microsoft® Hyper-V Server 2012
	Microsoft® Windows Server® 2012 Datacenter
	Microsoft® Windows Server® 2012 Standard
	Microsoft® Windows Server® 2012 Essentials
	Microsoft® Windows Storage Server 2012 Standard
	Microsoft® Hyper-V™ Server 2008 R2
	Microsoft® Windows Server® 2008 R2 Datacenter
	Microsoft® Windows Server® 2008 R2 Enterprise
	Microsoft® Windows Server® 2008 R2 Standard
	Microsoft® Windows® Server 2008 Datacenter
	Microsoft® Windows® Server 2008 Enterprise
	Microsoft® Windows® Server 2008 Standard
	VMware vSphere™ 5.5 Embedded
	VMware vSphere™ 5.5
	SUSE® Linux Enterprise Server 12
	SUSE® Linux Enterprise Server 11
	SUSE® Linux Enterprise Server 10
	SUSE® Linux Enterprise Server 10 with XEN
	Red Hat® Enterprise Linux 6
	Red Hat® Enterprise Linux 5
	Red Hat® Enterprise Linux 5 with XEN
	Citrix® XenServer®
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	Support of other Linux derivatives on demand

Server Management

Standard	ServerView Suite - Deploy SV Installation Manager SV Scripting Toolkit SV Deployment Manager (30-day trial version) ServerView Suite - Control SV Operations Manager incl. PDA and ASR & R (Prefailure and Analysis; Automatic Server Recovery and Restart) SV Performance Management SV Power Management SV RAID Manager ServerView Suite - Maintain SV Remote Management (iRMC) SV Update Management (BIOS, Firmware, Windows Drives and SV Agents) SV Asset Management SV Online Diagnostics ServerView Suite - Integrate SV Integration packs e.g. for Microsoft System Center, Nagios, HP, SIM, HP NNM, IBM Tivoli, Altiris Deployment Solutions and others

Server Management	
Option	ServerView Suite - Deploy SV Deployment Manager (full version) ServerView Suite - Maintain iRMC Advanced Pack incl. Advanced Video Redirection (AVR) and Remote Storage ServerView Suite - Dynamize SV Virtual-IO Manager (VIOM) SV Resource Orchestrator Virtual Edition (ROR VE) SV Resource Orchestrator Cloud Edition (ROR CE) ServerView Suite - Integrate SV Integration pack for Fujitsu ManageNow® solution
Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.

Dimensions / Weight	
Floor-stand (W x D x H)	177 x 651 x 456 mm
Rack (W x D x H)	483 x 611 x 177 mm
Dimension notes	Floorstand Width 177 mm without tilt protection (420 mm with tilt protection); depth measured includes handles on redundant PSU. Rack depth includes handles of redundant PSU, excludes rack handles / front
Height Unit Rack	4 U
Weight	16 kg - 32 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

Environmental	
Operating ambient temperature	10 - 35 °C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	30 dB(A) idle mode/ 30 dB(A) operation mode with SAS HDDs;36 dB(A) idle mode/ 36 dB(A) operation mode with HDD extension boxes;
Sound power (LWAd; 1B = 10dB)	4,0 B idle / 4,0 B operation mode; 4,8 idle mode/ 4,8 operation mode with SAS HDDs;5,4 B idle mode/ 5,4 B operation mode with HDD extension boxes;
Noise notes	Noise emissions and operation modes depend on system configuration.

Electrical values	
Power supply configuration	1x standard power supply or1x hot-plug power supply or 2x hot plug power supply for redundancy depending on model
Standard power supply output	800 W (90 % efficiency, 80 PLUS gold)
Hot-plug power supply output	450 W or 800 W (94 % efficiency, 80 PLUS platinum) or 800 W (96 % efficiency, 80 PLUS titanium)
Hot-plug power supply redundancy	Yes
Rated voltage range	100 V - 240 V
Rated frequency range	47 Hz - 63 Hz
Rated current max.	7.6 A The rated current in basic configuration values are pending confirmation.
Active power (min. configuration)	65 W
Active power (max. configuration)	432 W
Active power note	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/
Apparent power (max. configuration)	435 VA
Heat emission	1555.2 kJ/h (1474.0 BTU/h)
Power Supply Notes	800W - 96% efficiency (80 plus titanium)

Compliance	
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)
Germany	TÜV GS
Europe	CE Class A *

Compliance	
USA/Canada	CSAc/us ULc/us FCC Class A
Japan	VCCI Class A + JIS 61000-3-2
China	CCC (planned)
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request. * Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Components

Storage drives
SSD SATA, 6 Gb/s, 800 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
SSD SATA, 6 Gb/s, 400 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
SSD SATA, 6 Gb/s, 200 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
SSD SATA, 6 Gb/s, 100 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
HDD SATA, 6 Gb/s, 250 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
HDD SATA, 6 Gb/s, 3 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical
HDD SAS, 6 Gb/s, 900 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 600 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
HDD SAS, 6 Gb/s, 600 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
HDD SAS, 6 Gb/s, 450 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
HDD SAS, 6 Gb/s, 450 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 300 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 146 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 4 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SAS, 6 Gb/s, 3 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SAS, 6 Gb/s, 2 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SAS, 6 Gb/s, 1.2 TB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
HDD SAS, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical

Backup Drives
LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 6Gb/s
LTO5HH Ultrium, 1,500 GB, 140 MB/s, half height, SAS 6Gb/s
LTO6HH Ultrium, 2,500 GB, 160 MB/s, half height, SAS 6Gb/s
RDX Drive, 320 GB, 500 GB, 1 TB , 25 MB/s, half height, USB 3.0

Optical drives	Blu-ray Disc™ Triple Writer, (6x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	Blu-ray Disc™ Triple Writer, (6x BD-ROM ; 8x DVD; 24x CD), slimline, SATA I
	DVD-ROM, (16xDVD; 48xCD), half height, SATA I
	DVD Super Multi, (16xDVD, 8xDVD+RW 6xDVD-RW, 12xDVD-RAM; 48xCD, 32xCD-RW), half height, SATA I
	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
RAID Controller	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 5/6 512MB (D2616), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, Optional BBU for selected systems (based on LSI SAS2108)
	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 1GB (D3116C), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU (based on LSI SAS2208)
	RAID 0/1 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 0/1 (D2607), 8 ports int. RAID level: 0, 1, 10, No BBU support
Communication, Network	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.0 x8 (Fujitsu)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe 2.1 x8 (Intel®)
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe 2.1 x4 (Intel®)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe 2.1 x4 (Intel®)
Graphics add on cards	NVIDIA® Quadro® NVS 300, PCIe x1, 2x DVI/VGA
Rack infrastructure	Rack Mount Kit
	Cable Management for 19-inch DataCenter / PRIMECENTER Racks
	Cable Arm 2U for PRIMECENTER- and 3rd-party racks
Warranty	
Standard Warranty	3 years
Service level	Onsite Service Warranty conditions tbd
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM
Maintenance and Support Services - the perfect extension	
Support Pack Options	Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time 24x7, 4h Onsite Response Time
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services/support

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY TX2540 M1, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY TX2540 M1, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT.
Please find further information at http://www.fujitsu.com/global/about/environment

Copyrights

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.
For further information see http://www.fujitsu.com/fts/resources/navigation/terms-of-use.html
Copyright © Fujitsu Technology Solutions

Disclaimer

Technical data are subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

Contact
FUJITSU LIMITED

Website: www.fujitsu.com
2014-05-05 CE-EN

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.
For further information see http://www.fujitsu.com/fts/resources/navigation/terms-of-use.html
Copyright © Fujitsu Technology Solutions